FOURTEENTH EDITION

ISSUED EVERY THREE YEARS

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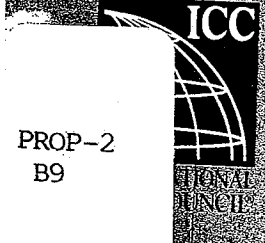
1999



BUILDING OFFICIALS & CODE ADMINISTRATORS INTERNATIONAL, INC.

PROP-2
B9

EXHIBIT E

2305.5 Nonloadbearing walls: Studs in nonloadbearing walls and partitions shall not be spaced more than 48 inches (1219 mm) o.c., and are permitted to be erected with the long dimension parallel to the wall, unless otherwise approved as an integrated assembly by testing. A single top plate shall be prohibited except where such plate is installed in accordance with Section 2305.4.2.

2305.5.1 Notching and boring: Notches in studs shall not exceed 40 percent of the stud depth. Bored holes shall not exceed 60 percent of the stud depth and shall not be closer than $^5/_8$ inches (15 mm) to the edge. Notches and holes shall not occur in the same cross-section.

2305.6 Support and anchorage: Support and anchorage of members on girders, walls and beams shall conform to Sections 2305.6.1 through 2305.6.3.

2305.6.1 Support and anchorage on girders: All members framing into girders shall be anchored or tied to secure continuity. The ends of all wood beams that rest on girders shall bear not less than 4 inches (102 mm) or shall be supported in approved metal stirrups, hangers or on wood clips or ribbon strips. Beams framing from opposite sides shall either lap at least 6 inches (152 mm) and be bolted or spiked together or, where framed end-to-end, the beams shall be secured together by approved ties, straps, dogs, plates or sheathing.

2305.6.2 Support and anchorage on walls or beams: Except where supported on a 1 × 4 ribbon strip and nailed to the adjoining stud, joists shall bear on walls or beams of wood or steel not less than $1^1/_2$ inches (38 mm) or shall be supported by metal stirrups, hangers or a nominal 2-inch wood ledger strip. The minimum concrete or masonry support shall be 3 inches (76 mm). Joists framing over beams from opposite sides shall either lap at least 3 inches (76 mm) and be securely fastened together or, where framed end-to-end, the joists shall be secured together by approved ties, straps, dogs, plates or sheathing.

2305.6.3 Girder supports: Wall plate boxes of the self-releasing type, or approved hangers, shall be provided where beams and girders are supported by concrete or masonry. An air space of $^1/_2$ inch (13 mm) shall be provided at the top, end and sides of the member unless approved naturally durable or *preservative-treated* wood in accordance with Section 2311.0 is installed. Wood beams and girders supported by walls required to have a fireresistance rating of 2 hours or more shall have not less than 4 inches (102 mm) of solid concrete or solid masonry between their ends and the outside face of the wall and between adjacent beams.

* **2305.7 Wind bracing:** Structural members and connections that resist wind pressures shall be designed for the wind loads as required by Section 1609.0.

2305.7.1 Sheathing: Bracing sheathing shall be applied with all edges supported.

2305.7.2 Design: Members or connections shall be permitted to be designed in accordance with Section 2303.1.3 for wind speeds shown in Figure 1609.3.

2305.8 Seismic bracing: Where structural analysis of the seismic force-resisting system is not provided, buildings shall meet the provisions of this section and shall have roof and exterior wall *dead loads* less than or equal to 15 psf (718 Pa) and floor *dead loads* less than or equal to 10 psf (479 Pa).

Exceptions

1. Detached *one-* and *two-family dwellings* located in seismic map areas having an effective peak velocity-related acceleration (A_v) value less than 0.15.
2. The exterior wall weight limitation shall not apply to masonry veneer attached to one-story Seismic Performance Category B buildings.

2305.8.1 Wall bracing required: All exterior walls and required interior-braced walls shall be braced by one of the types of sheathing prescribed in Table 2305.8.1 for each 25 lineal feet (7620 mm) of exterior wall or required interior-braced wall line. The required length of sheathing shall be distributed along the length of the braced wall with sheathing placed at each end of the exterior wall or interior-braced wall. A minimum 4-foot (1219 mm) length of sheathing shall be located at the end of each braced wall. The construction of braced walls shall comply with the requirements of Section 2305.9.

2305.8.2 Double-sheathed walls: Where braced walls are sheathed on both sides with identical sheathing, the required length of sheathing in Table 2305.8.1 is permitted to be taken as one-half the tabular length. Where different sheathing materials are used on either side of a wall, the required length of sheathing in Table 2305.8.1 is permitted to be taken as one-half of the tabular length for the material requiring the greater length. Double-sheathed walls shall have a minimum length of 4 feet (1219 mm).

Table 2305.8
WALL SPACING AND HEIGHT LIMITATIONS FOR WOOD FRAME CONSTRUCTION

Seismic Performance Category	Maximum distance between interior-braced walls (feet)[c]	Maximum stories (height) permitted[c]
A	See Section 1610.1, Exception #3	
B	35	3 (40 feet)
C	25	2 (30 feet)
D[a]	25	1 (20 feet)[b]
E	Engineering analysis required, see Section 2306.0	

Note a. Applies only to Seismic Hazard Exposure Group I; engineering analysis required for Seismic Hazard Exposure Group II.
Note b. Detached one- and two-family dwellings shall not exceed two stories or 30 feet in height.
Note c. 1 foot = 304.8 mm.

2305.8.3 Stud walls: Stud walls that are less than the full height of the story shall be braced as required for exterior walls or interior-braced walls and shall be considered an additional story.

2305.8.4 Sheathing installation: Sheathing shall be installed in accordance with the provisions of Table 2305.13 where acting as wall bracing. To be considered effective as bracing,